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Amendments to the Claims:

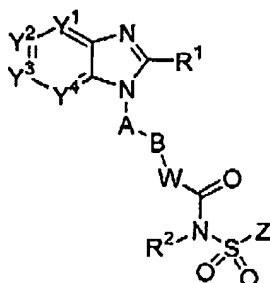
Claims 1-12 (Canceled)

Claims 13-25 (Canceled)

26. (Canceled)

27. (Canceled)

28. (Currently Amended~~New~~) A method for the treatment of a disorder or condition ~~mediated by an EP4 receptor~~ in a mammalian subject including a human, wherein the disorder or condition is selected from pain, inflammation, an inflammation associated disorder, osteoarthritis, and rheumatoid arthritis, said method comprising administering to a mammal in need of such treatment an effective amount of a compound of the following formula:



(I)

or the pharmaceutically acceptable salts thereof, wherein

one of Y¹, Y², Y³ and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₇ cycloalkyl, C₁₋₈ alkoxy, halo-substituted C₁₋₈ alkoxy, C₁₋₈ alkyl-S(O)_m-, Q¹-, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, amino, mono- or di-(C₁₋₈ alkyl)amino, C₁₋₄alkyl-C(=O)-N(R³)- or C₁₋₄alkyl-S(O)_m-N(R³)-, wherein said C₁₋₈ alkyl, C₂₋₈ alkenyl

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and C₂₋₈ alkynyl are optionally substituted with halo, C₁₋₃ alkyl, hydroxy, oxo, C₁₋₄ alkoxy-, C₁₋₄ alkyl-S(O)m-, C₃₋₇ cycloalkyl-, cyano, indanyl, 1,2,3,4-tetrahydronaphthyl, 1,2-dihydronaphthyl, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, Q¹-, Q¹-C(=O)-, Q¹-O-, Q¹-S(O)m-, Q¹-C₁₋₄alkyl-O-, Q¹-C₁₋₄alkyl-S(O)m-, Q¹-C₁₋₄alkyl-C(O)-N(R³)-, Q¹-C₁₋₄alkyl-N(R³)- or C₁₋₄alkyl-C(O)-N(R³)-;

Q¹ is a 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 4 heteroatoms selected from O, N and S, and is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, nitro, amino, mono- or di-(C₁₋₄alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄alkylC(=O)-, HO(O=)C-, C₁₋₄alkyl-O(O=)C-, R³N(R⁴)C(=O)-, C₁₋₄alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)- or NH₂(HN=)C-;

A is a 5-6 membered monocyclic aromatic ring optionally containing up to 3 heteroatoms selected from O, N and S, wherein said 5-6 membered monocyclic aromatic ring is optionally substituted with up to 3 substituents selected from halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄alkylthio, nitro, amino, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, acetyl, R³N(R⁴)C(=O)-, HO(O=)C-, C₁₋₄alkyl-O(O=)C-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)- and NH₂(HN=)C-;

B is halo-substituted C₁₋₆ alkylene, C₃₋₇ cycloalkylene, C₂₋₆ alkenylene, C₂₋₆ alkynylene, -O-C₁₋₅ alkylene, C₁₋₂ alkylene-O-C₁₋₂ alkylene or C₁₋₆ alkylene optionally substituted with an oxo group or C₁₋₃ alkyl;

W is NH, N-C₁₋₄ alkyl, O, S, N-OR⁵ or a covalent bond;

R² is H, C₁₋₄ alkyl, OH or C₁₋₄ alkoxy;

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Z is a 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from O, N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, C₁₋₄ alkenyl, C₁₋₄ alkynyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, nitro, amino, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄alkylC(=O)-, R³C(=O)N(R⁴)-, HO(O=)C-, C₁₋₄alkyl-O(O=)C-, C₁₋₄alkylsulfonylamino, C₃₋₇ cycloalkyl, NH₂(HN=)C-, Q²-S(O)m-, Q²-O-, Q²-N(R³)- or Q²-;

L is halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, nitro, amino, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄alkylC(=O)-, HO(O=)C-, C₁₋₄alkyl-O(O=)C-, C₁₋₄alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)-, NH₂(HN=)C-, R³N(R⁴)C(=O)-, R³N(R⁴)S(O)m-, Q²-, Q²-C(=O)-, Q²-O-, Q²-C₁₋₄alkyl-O-, or two adjacent L groups are optionally joined together to form an alkylene chain having 3 or 4 members in which one or two (non-adjacent) carbon atoms are optionally replaced by oxygen atoms;

m is 0, 1 or 2;

R³ and R⁴ are independently selected from H and C₁₋₄ alkyl ;

R⁵ is H, C₁₋₄ alkyl, C₁₋₄ alkyl-(O=)C- or C₁₋₄ alkyl-O-(O=)C- ; and

Q² is a 5-12 membered monocyclic or bicyclic aromatic ring, or a 5-12 membered tricyclic ring optionally containing up to 3 heteroatoms selected from O, N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, C₂₋₄ alkenyl, C₂₋₄ alkynyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, nitro, amino, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋

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4alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄alkyl- (O=)C-, R³(R⁴)C(=O)N-, HO(O=)C-, C₁₋₄ alkyl-O(O=)C-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, C₁₋₄ alkyl-C(=O)NH- or NH₂(HN=)C-.

29. (Currently Amended) A method according to Claim 28, wherein

one of Y¹, Y², Y³, and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₇ cycloalkyl, C₁₋₈ alkoxy, halo-substituted C₁₋₈ alkoxy, C₁₋₈ alkyl-S(O)m-, Q¹-, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, amino, mono- or di-(C₁₋₈ alkyl)amino, C₁₋₄alkyl-C(=O)-N(R³)- or C₁₋₄alkyl-S(O)m-N(R³)-, wherein said C₁₋₈ alkyl, C₂₋₈ alkenyl and C₂₋₈ alkynyl are optionally substituted with halo, C₁₋₃ alkyl, hydroxy, oxo, C₁₋₄ alkoxy-, C₁₋₄ alkyl-S(O)m-, C₃₋₇ cycloalkyl-, cyano, indanyl, 1,2,3,4-tetrahydronaphthyl, 1,2-dihydronaphthyl, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, Q¹-, Q¹-C(=O)-, Q¹-O-, Q¹-S(O)m-, Q¹-C₁₋₄ alkyl-O-, Q¹-C₁₋₄ alkyl-S(O)m-, Q¹-C₁₋₄alkyl-C(=O)-N(R³)-, or C₁₋₄alkyl-C(=O)-N(R³)-;

Q¹ is a 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 4 heteroatoms selected from O, N and S, and is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, nitro, amino, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkylC(=O)-, HO(O=)C-, C₁₋₄ alkyl-O(O)C-, R³N(R⁴)C(=O)-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)- or NH₂(HN=)C-;

A is a 5-6 membered monocyclic aromatic ring optionally containing up to 2 heteroatoms selected from O, N, and S, wherein said 5-6 membered monocyclic aromatic ring is optionally substituted with up to 2 substituents selected from halo,

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C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy and halo-substituted C₁₋₄ alkoxy;

B is C₃₋₇ cycloalkylene or C₁₋₆ alkylene optionally substituted with an oxo group or C₁₋₃ alkyl;

W is NH, N-C₁₋₄ alkyl, O or N-OH;

R² is H or C₁₋₄ alkyl;

Z is a 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from, N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, ϵ -C₂₋₄ alkenyl, C₂₋₄ alkynyl, hydroxy, C₁₋₄ alkoxy, nitro, amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkylC(=O)-, R³C(=O)N(R⁴)-, HO(O=C)-, C₁₋₄ alkyl-O(O=C)-, C₁₋₄ alkylsulfonylamino, C₁₋₄ alkyl-C(=O)NH-, Q²-S(O)_m-, Q²-O-, Q²-N(R³)- or Q²-;

L is halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, mono- or di-(C₁₋₄ alkyl)amino, halo-substituted C₁₋₄ alkoxy, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkylC(=O)-, HO(O=C)-, C₁₋₄ alkyl-O(O=C)-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)-, R³N(R⁴)C(=O)-, R³N(R⁴)S(O)_m-, Q²-, Q²-C(=O)-, Q²-O-, Q²-C₁₋₄alkyl-O-, or two adjacent L groups are optionally joined together to form an alkylene chain having 3 or 4 members in which one or two (non-adjacent) carbon atoms are optionally replaced by oxygen atoms;

m is 0 or 2;

R³ and R⁴ are independently selected from H and C₁₋₄ alkyl; and

Q² is a 5-12 membered monocyclic or bicyclic aromatic ring, or a 8-12 membered tricyclic ring optionally containing up to 3 heteroatoms selected from O, N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, C₂₋₄ alkenyl, C₂₋₄

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alkynyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, C₁₋₄ alkylthio, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkyl-(O=)C-, R³(R⁴)C(=O)N-, HO(O=)C-, C₁₋₄ alkyl-O(O=)C-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl or C₁₋₄ alkyl-C(=O)NH-.

30. (Previously Presented) A method according to Claim 29, wherein

one of Y¹, Y², Y³, and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₇ cycloalkyl, Q¹-, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, amino, mono- or di-(C₁₋₈ alkyl)amino, wherein said C₁₋₈ alkyl is optionally substituted with halo, C₁₋₃ alkyl, hydroxy, oxo, C₁₋₄ alkoxy-, C₁₋₄ alkyl-S(O)m-, C₃₋₇ cycloalkyl-, cyano, indanyl, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, Q¹-, Q¹-C(O)-, Q¹-O-, Q¹-S-, Q¹-C₁₋₄ alkyl-O-, or C₁₋₄alkyl-C(O)-N(R³)-;

Q¹ is a 5-12 membered monocyclic aromatic ring optionally containing up to 4 heteroatoms selected from N and S, and is optionally substituted with halo, C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl and C₁₋₄ alkylC(=O)-;

A is 5-6 membered monocyclic aromatic ring optionally substituted with halo, C₁₋₄ alkyl or C₁₋₄ alkoxy;

B is C₃₋₇ cycloalkylene or C₁₋₆ alkylene optionally substituted with an oxo group or C₁₋₃ alkyl;

W is NH, N-C₁₋₄ alkyl, O or N-OH;

R² is H or C₁₋₄ alkyl;

Z is 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from, N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-

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substituted C₁₋₄ alkyl, C₂₋₄ alkenyl, C₁₋₄ alkoxy, nitro, amino, cyano, R³C(=O)N(R⁴)-, C₁₋₄ alkyl-O(O=)C-, Q²-S(O)m-, Q²-O-, Q²-N(R³)- or Q²-; L is halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, mono- or di-(C₁₋₄ alkyl)amino, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkylC(=O)-, HO(O=)C-, C₁₋₄ alkyl-O(O=)C-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)N(R⁴)-, R³N(R⁴)C(=O)-, R³N(R⁴)S(O)m-, Q²-, Q²-C(=O)-, Q²-O-, Q²-C₁₋₄alkyl-O-, or two adjacent L groups are optionally joined together to form an alkylene chain having 3 or 4 members in which one or two (non-adjacent) carbon atoms are optionally replaced by oxygen atoms; m is 0 or 2; R³ and R⁴ are independently selected from H and C₁₋₄ alkyl; and Q² is a 5 or 6 membered monocyclic aromatic ring, or a 8-12 membered tricyclic ring containing up to 3 heteroatoms selected from N and S, wherein said 5 or 6 membered monocyclic aromatic ring is optionally substituted with halo.

31. (Previously Presented) A method according to Claim 30, wherein

one of Y¹, Y², Y³ and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl or C₃₋₇ cycloalkyl, wherein said C₁₋₈ alkyl is optionally substituted with halo, C₁₋₃ alkyl, hydroxy, oxo, C₁₋₄ alkoxy-, C₁₋₄ alkyl-S(O)m-, C₃₋₇ cycloalkyl-, cyano, indanyl, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, Q¹-, Q¹-C(=O)-, Q¹-O-, Q¹-S-, Q¹-C₁₋₄ alkyl-O-, or C₁₋₄alkyl-C(O)-N(R³)-;

Q¹ is a 5 or 6 membered monocyclic aromatic ring optionally containing up to 4 heteroatoms selected from N and S;

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A is 5-6 membered monocyclic aromatic ring system optionally substituted with halo or C₁₋₄ alkyl;

B is C₃₋₇ cycloalkylene or C₁₋₆ alkylene optionally substituted with an oxo group or C₁₋₃ alkyl;

W is NH, N-C₁₋₄ alkyl, O or N-OH;

R² is H or C₁₋₄ alkyl;

Z is 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from N and S, wherein said 5-12 membered monocyclic or bicyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, C₂₋₄ alkenyl, C₁₋₄ alkoxy, nitro, amino, cyano,

R³C(=O)N(R⁴)-, C₁₋₄ alkyl-O(=O)C-, Q²-S(O)_m-, Q²-O-, Q²-N(R³)- or Q²-;

L is halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, cyano, HO-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl, aminosulfonyl, C₁₋₄ alkylC(=O), HO(O=)C-, C₁₋₄ alkyl-O(=O)C-, C₁₋₄ alkylsulfonylamino, C₃₋₇ cycloalkyl, R³C(=O)NR⁴-, R³N(R⁴)C(=O)-, R³N(R⁴)S(O)_m-, Q²-, Q²-C(=O)-, Q²-O-, Q²-C₁₋₄alkyl-O-, or two adjacent L groups are optionally joined together to form an alkylene chain having 3 or 4 members in which one or two (non-adjacent) carbon atoms are optionally replaced by oxygen atoms;

m is 0 or 2;

R³ and R⁴ are independently selected from H and C₁₋₄ alkyl; and

Q² is 5 or 6 membered monocyclic aromatic ring or a 8-12 membered tricyclic ring optionally containing 1 sulfur atom wherein said 5 or 6 membered monocyclic aromatic ring is optionally substituted with halo.

32. (Previously Presented) A method according to Claim 31, wherein

one of Y¹, Y², Y³ and Y⁴ is N and the others are independently selected from CH and C(L);

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R¹ is C₁₋₅ alkyl or C₃₋₇ cycloalkyl, wherein said C₁₋₅ alkyl is optionally substituted with C₁₋₃ alkyl, hydroxy, oxo, pyrrolidinyl, piperidyl, oxopyrrolidinyl, oxopiperidyl, Q¹-, or C₁₋₄alkyl-C(O)-N(H)-;

Q¹ is 5-12 membered monocyclic aromatic ring system optionally containing up to 2 heteroatoms selected from N and S,

A is 5-6 membered monocyclic aromatic ring system;

B is C₁₋₃ alkylene optionally substituted with C₁₋₃ alkyl;

W is NH, N-C₁₋₂ alkyl or O;

R² is H;

Z is 5-12 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from N and S, wherein said 5-12 membered monocyclic aromatic ring is optionally substituted with halo, C₁₋₄ alkyl, nitro, R³C(=O)N(R⁴)- or Q²-;

L is halo, C₁₋₄ alkyl, halo-substituted C₁₋₄ alkyl, hydroxy, C₁₋₄ alkoxy, halo-substituted C₁₋₄ alkoxy, cyano, HO-C₁₋₄ alkyl, acetyl, R³N(R⁴)C(=O)-, R³N(R⁴)S(O)m-, Q²-, Q²-C(=O)-, or two adjacent L groups are joined together to form a methylenedioxy group;

R³ and R⁴ are independently selected from H and C₁₋₄ alkyl; and

Q² is 5 or 6 membered monocyclic aromatic ring system.

33. (Currently Amended) A method according to Claim 32, wherein

one of Y¹, Y², Y³ and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is C₁₋₅ alkyl optionally substituted with C₁₋₃ alkyl, hydroxy, oxo, 5 or 6 membered monocyclic aromatic ring, wherein said 5 or 6 membered monocyclic aromatic ring is containing 1 or 2 heteroatoms selected from N and S, or C₁₋₄alkyl-C(O)-N(R³)-;

A is phenyl;

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B is C₁₋₂ alkylene optionally substituted with methyl;

W is NH, N-CH₃ or O;

R² is H;

Z is 5-10 membered monocyclic or bicyclic aromatic ring optionally containing up to 3 heteroatoms selected from N and S, wherein said 5-10 membered monocyclic aromatic ring is optionally substituted with chloro, bromo, methyl, nitro, CH₃C(=O)NH-, tBuC(=O)NH- or phenyl; and

L is chloro, methyl, ~~trifluoromethyl~~ trifluoromethyl, hydroxy, methoxy, cyano, acetyl, -C(=O)NH₂, ~~trifluoro~~trifluoromethoxy, methanesulfonyl, or 1-hydroxy-1-methyl-ethyl, or two adjacent L groups are joined together to form a methylenedioxy group.

34. (Currently Amended) A method according to Claim 33, wherein

one of Y¹, Y², Y³ and Y⁴ is N and the others are independently selected from CH and C(L);

R¹ is methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, neopentyl, thiazolylethyl methylamino, dimethylamino, pyrrolidinyl, pyridyl, or 1-acetylamino-1-methylethyl;

A is phenyl;

B is ethylene or propylene;

W is NH, N-CH₃ or O;

R² is H;

Z is phenyl, pyrazolyl, thiazolyl, thiadiazolyl, thienyl, naphthyl or benzothienyl, said phenyl, pyrazolyl, thiazolyl, thiadiazolyl and thienyl being optionally substituted with one to three substituents independently selected from chloro, bromo, methyl, acetylamino, pivaloylamino, nitro and phenyl; and

L is chloro, methyl, ~~trifluoromethyl~~ trifluoromethyl, hydroxy, methoxy, cyano, acetyl, -C(=O)NH₂, ~~trifluoro~~trifluoromethoxy, methanesulfonyl, or 1-hydroxy-1-methyl-ethyl, or two adjacent L groups are joined together to form a methylenedioxy group.

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35. (Currently Amended) A method according to Claim 34, wherein

Y¹, Y², Y³ and Y⁴ are selected from the group consisting of

- a) Y¹ and Y³ are C(L), Y² is CH and Y⁴ is N;
- b) Y¹ is CH, Y² and Y³ are C(L) and Y⁴ is N;
- c) Y¹, Y² and Y³ are C(L) and Y⁴ is N;
- d) Y¹ and Y³ are C(L), Y² is N and Y⁴ is CH;
- e) Y¹ and Y² are CH, Y³ is C(L) and Y⁴ is N;
- f) Y¹ and Y³ are CH, Y² is C(L) and Y⁴ is N;
- g) Y¹ and Y² are C(L), Y³ is CH and Y⁴ is N;
- h) Y¹ and Y² are C(L), Y³ is N and Y⁴ is CH;
- i) Y¹ is C(L), Y² and Y³ are CH, and Y⁴ is N; and
- j) Y² is C(L), Y¹ and Y³ are CH, and Y⁴ is N;

R¹ is methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, neopentyl, thiazolyethyl, methylamino, dimethylamino, pyrrolidinyl, pyridyl, or 1-acetylamino-1-methylethyl;

A is phenyl;

B is ethylene or propylene;

W is NH, N-CH₃ or O;

R² is H;

Z is phenyl, pyrazolyl, thiazolyl, thiadiazolyl, thienyl, naphthyl or benzothienyl, said phenyl, pyrazolyl, thiazolyl, thiadiazolyl and thienyl being optionally substituted with one to three substituents independently selected from chloro, bromo, methyl, acetylamino, pivaloylamino, nitro and phenyl; and

L is chloro, methyl, trifluoromethyl, hydroxy, methoxy, cyano, acetyl, -C(=O)NH₂, trifluoromethyloxy, methanesulfonyl, or 1-hydroxy-1-methyl-ethyl, or two adjacent L groups are joined together to form a methylenedioxy group.

36. (Currently Amended) A method according to Claim 35, wherein

Y¹, Y², Y³ and Y⁴ are selected from the group consisting of

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a) Y¹ and Y³ are C(L), Y² is CH and Y⁴ is N;

b) Y¹ is CH, Y² and Y³ are C(L) and Y⁴ is N;

c) Y¹, Y² and Y³ are C(L) and Y⁴ is N; and

d) Y¹ and Y³ are C(L), Y² is N and Y⁴ is CH;

R¹ is methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, neopentyl, thiazolylethyl
methylamino, dimethylamino, pyrrolidinyl, pyridyl, or 1-acetylamino-1-methylethyl;

A is phenyl;

B is ethylene or propylene;

W is NH, N-CH₃ or O;

R² is H;

Z is phenyl, pyrazolyl, thiazolyl, thiadiazolyl, thienyl, naphthyl or benzothienyl, said
phenyl, pyrazolyl, thiazolyl, thiadiazolyl and thienyl being optionally substituted
with one to three substituents independently selected from chloro, bromo, methyl,
acetylamino, pivaloylamino, nitro and phenyl; and

L is chloro, methyl, trifluoromethyl, hydroxy, methoxy, cyano, acetyl, -C(=O)NH₂,
trifluoromethoxy, methanesulfonyl, or 1-hydroxy-1-methyl-ethyl, or two adjacent
L groups are joined together to form a methylenedioxy group.

37. (Previously presented) A method according to Claim 28 wherein the compound is selected from

- 3-(4-{2-[[[(5-chloro-1,3-dimethyl-1H-pyrazol-4-yl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine;
- 3-(4-{2-[[[(2,4-dimethyl-1,3-thiazol-5-yl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine;
- N-[5-({[(2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)phenyl]ethyl)amino]carbonyl]amino}sulfonyl)-1,3,4-thiadiazol-2-yl]acetamide;
- 2-ethyl-5,7-dimethyl-3-(4-{2-[methyl({[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3H-imidazo[4,5-b]pyridine;

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- 2-ethyl-5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]propyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 2-[4-(2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridin-3-yl)phenyl]-1-methylethyl (4-methylphenyl)sulfonylcarbamate;
- 5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-propyl-3*H*-imidazo[4,5-*b*]pyridine;
- 2-isopropyl-5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 2-butyl-5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 2-isobutyl-5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-neopentyl-3*H*-imidazo[4,5-*b*]pyridine;
- 5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-[2-(1,3-thiazol-2-yl)ethyl]-3*H*-imidazo[4,5-*b*]pyridine;
- 3-{4-[2-[[[(4-biphenyl)sulfonyl]amino]carbonyl]amino]ethyl}phenyl}-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,7-dimethyl-3-{4-[2-[[[(1-naphthyl)sulfonyl]amino]carbonyl]amino]ethyl}phenyl}-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,7-dimethyl-3-{4-[2-[[[(2-naphthyl)sulfonyl]amino]carbonyl]amino]ethyl}phenyl}-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,7-dimethyl-3-(4-{2-[[[(2-thienyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;

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- 3-(4-{2-[[[(5-chloro-2-thienyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 3-(4-{2-[[[(4,5-dichloro-2-thienyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 3-{4-[2-[[[(1-benzothien-2-yl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl}-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 3-(4-{2-[[[(2-chlorophenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,6-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 5,6-dichloro-2-ethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 5-chloro-2-ethyl-7-methyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 6-cyano-2-ethyl-5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-4,6-dimethyl-1-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-1*H*-imidazo[4,5-*c*]pyridine;
- 2-ethyl-3-{4-[2-[[[(3-hydroxy(oxido)amino)phenyl]sulfonyl]amino]carbonyl]amino]ethyl}phenyl}-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 3-(4-{2-[[[(4-chlorophenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- n*-[4-[[[(2-[4-(2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridin-3-yl)phenyl]ethyl]amino)carbonyl]amino]sulfonyl]phenyl]-2,2-dimethylpropanamide;

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3-(4-{2-[[[(2-chlorophenyl)sulfonyl]amino]carbonyl]amino}ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

3-(4-{2-[[[(3-chlorophenyl)sulfonyl]amino]carbonyl]amino}ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

3-(4-{2-[[[(5-chloro-2-thienyl)sulfonyl]amino]carbonyl]amino}ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

3-(4-{2-[[[(5-bromo-2-thienyl)sulfonyl]amino]carbonyl]amino}ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

3-(4-{2-[[[(2-bromophenyl)sulfonyl]amino]carbonyl]amino}ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

3-{4-[2-[[[(4-chloro-3-nitrophenyl)sulfonyl]amino]carbonyl]amino]ethyl}phenyl}-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;

2-[4-(2-ethyl-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;

2-{4-[5,7-dimethyl-2-(methylamino)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate;

N-{[(2-{4-[5,7-dimethyl-2-(methylamino)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl)amino]carbonyl}-4-methylbenzenesulfonamide;

N-{[(2-[4-(2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridin-3-yl)phenyl]ethyl)amino]carbonyl}-2-thiophenesulfonamide;

2-[4-(4,6-dimethyl-2-phenyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;

2-[4-(2-butyl-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;

2-{4-[4,6-dimethyl-2-(3-phenylpropyl)-1*H*-imidazo[4,5-*c*]pyridin-1-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate;

N-{[(2-{4-[5,7-dimethyl-2-(1*H*-pyrazol-3-yl)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl)amino]carbonyl}-4-methylbenzenesulfonamide;

2-{4-[2-(1,1-dimethylethyl)-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate; and

salts thereof.

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38. (Previously presented) A method according to Claim 28 wherein the compound is selected from

- 2-[4-(2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridin-3-yl)phenyl]-1-methylethyl (4-methylphenyl)sulfonylcarbamate;
- 5,7-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-[2-(1,3-thiazol-2-yl)ethyl]-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,7-dimethyl-3-(4-{2-[[[(2-thienyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 3-(4-{2-[[[(2-chlorophenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-5,6-dimethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 5,6-dichloro-2-ethyl-3-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-3*H*-imidazo[4,5-*b*]pyridine;
- 2-ethyl-4,6-dimethyl-1-(4-{2-[[[(4-methylphenyl)sulfonyl]amino}carbonyl]amino]ethyl}phenyl)-1*H*-imidazo[4,5-*c*]pyridine;
- 2-[4-(2-ethyl-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;
- 2-{4-[5,7-dimethyl-2-(methylamino)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate;
- N*-{[(2-{4-[5,7-dimethyl-2-(methylamino)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl)amino]carbonyl}-4-methylbenzenesulfonamide;
- N*-{[(2-[4-(2-ethyl-5,7-dimethyl-3*H*-imidazo[4,5-*b*]pyridin-3-yl)phenyl]ethyl)amino]carbonyl}-2-thiophenesulfonamide;
- 2-[4-(4,6-dimethyl-2-phenyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;

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2-[4-(2-butyl-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)phenyl]ethyl (4-methylphenyl)sulfonylcarbamate;
2-{4-[4,6-dimethyl-2-(3-phenylpropyl)-1*H*-imidazo[4,5-*c*]pyridin-1-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate;
N-{[(2-{4-[5,7-dimethyl-2-(1*H*-pyrazol-3-yl)-3*H*-imidazo[4,5-*b*]pyridin-3-yl]phenyl}ethyl)amino]carbonyl}-4-methylbenzenesulfonamide;
2-{4-[2-(1,1-dimethylethyl)-4,6-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]phenyl}ethyl (4-methylphenyl)sulfonylcarbamate; and

salts thereof.

39. (Currently Amended) A method according to claim 28 wherein the compound is

2-ethyl-4,6-dimethyl-1-(4-{2-[(4-methylphenyl)sulfonyl]amino}carboxylcarbonyl)amino]ethyl}phenyl)-1*H*-imidazo[4,5-*c*]pyridine or a pharmaceutically acceptable salt thereof.